

**RG393, 50 Ohm, 6 GHz, 200°C, ø9.9 mm, FEP jacket**

RG\_393\_/U

**Properties**

- Mil standard RG cable
- Excellent RF performance for precision applications
- Suitable for use in applications up to 6 GHz
- Extended temperature range



<b>Construction</b>			
Component	Material	Detail	Diameter
Centre conductor	Copper, Silver plated	Strand-07	2.46 mm
Dielectric	PFA (Perfluoroalkoxy)		7.25 mm
Outer conductor	Copper, Silver plated	Braid, 92%	8 mm
Outer conductor	Copper, Silver plated	Braid, 94%	8.75 mm
Jacket	FEP (Fluorinated ethylene propylene)	RAL 8015 - br	9.9 mm +/- 0.25 mm

<b>Electrical data</b>	
Impedance	50 Ω +/-2Ω
Operating frequency	≤ 6 GHz
Capacitance	95.9 pF/m
Velocity of signal propagation	70 %
Signal delay	4.79 ns/m
Screening effectiveness	81 dB at frequency 0.001 GHz ... 6GHz
Insulation resistance	100000000 MΩ*m
Operating Voltage (at sea level)	≤ 5.5 kVrms
Test voltage (50 Hz/1 min)	≤ 12.5 kVrms

<b>Mechanical data</b>	
Weight	approx. 229 g/m
Static bending radius	≥ 60 mm
Repeated bending radius	100 mm
Dynamic bending radius	< 150 mm

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Environmental data	
Operation temperature	-65 °C ... 200 °C
Installation temperature	-20 °C ... 60 °C
Flame propagation standard	IEC 60332-3
Fire characteristics	IEC 60332-1-2 contains halogene

### Additional Information

MIL reference: M17/127-RG393

### Suitable connectors

Cable group U33

### Ordering information

Item number	Item description	Available as assembly only
22511430	RG_393_/U	No

### Power Matrix

Calculation: typical Attenuation [ formula: (a\*f<sup>0.5</sup> + b\*f) ] and maximum Power CW [ formula: (p/f<sup>0.5</sup>) ]

a coefficient typical =	<b>0.1749</b>	b coefficient typical =	<b>0.129</b>
fmax =	<b>6</b>	P at 1 GHz =	<b>1461</b>
<b>Frequency</b>	<b>Nom. attenuation</b>	<b>Nom. attenuation</b>	<b>CW power</b>
<b>GHz</b>	<b>(dB/m)</b>	<b>(dB/ft)</b>	<b>(W)</b>
	sea level 25°C ambient temperature	sea level 25°C ambient temperature	sea level 40°C ambient temperature
0.20	0.104	0.032	3267
0.40	0.162	0.049	2310
0.60	0.213	0.065	1886
0.80	0.260	0.079	1633
1.00	0.304	0.093	1461
1.20	0.346	0.106	1334
1.40	0.388	0.118	1235
1.60	0.428	0.130	1155
1.80	0.467	0.142	1089
2.00	0.505	0.154	1033
4.00	0.866	0.264	730
6.00	1.202	0.366	596

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